

WHAT IS CLAIMED IS:

1. A cylindrical roller bearing comprising an inner ring having a raceway surface in the outer periphery, an outer ring having a raceway surface in the inner periphery, a plurality of cylindrical rollers rollably disposed between the raceway surface of the inner ring and the raceway surface of the outer ring, and a resin cage holding the cylindrical rollers at predetermined intervals, wherein said cage is composed of a pair of annuluses and a plurality of columns interconnecting the annuluses, and pockets are formed for receiving cylindrical rollers between adjacent columns and are radially positioned with respect to the cylindrical rollers, and the relation $r / Lw \geq 0.1$ holds where r is the radius of curvature of the corners of the pockets, and Lw is the length of the cylindrical rollers.

2. A cylindrical roller bearing as set forth in Claim 1, wherein the relation $r / k1 \leq 1$ holds, where r is the radius of curvature of the corners of the pockets of the cage, and $k1$ is the minimum dimension on the inner diameter side of the annulus of the cage.

3. A cylindrical roller bearing as set forth in Claim 1, wherein the relation $r < k2 + r1$ holds, where r is the radius of curvature of the corners of the pocket of the cage, $k2$ is the amount of projection of a contact section of the pocket for contact with the cylindrical roller end surface, and $r1$ is the

axial chamfer of the cylindrical roller.

4. A cylingrical roller bearing as set forth in claim 2, wherein the relation $r < k_2 + r_1$ holds, where r is the radius of curvature of the corners of the pocket of the cage, k_2 is the amount of projection of a contact section of the pocket for contact with the cylindrical roller end surface, and r_1 is the axial chamfer of the cylindrical roller.

5. A cylindrical roller bearing as set forth in Claim 1, wherein the relation $w_5 \cdot Z / \phi d_1 \cdot \pi > 0.1$ holds, where ϕd_1 is the inner diameter of the cage, w_5 is the distance from the contact section of the pocket that contacts the cylindrical roller end surface to the column, and z is the number of cylindrical rollers.

6. A cylindrical roller bearing cage wherein the cage is composed of a pair of annuluses and a plurality of columns interconnecting the annuluses, and pockets are formed for receiving cylindrical rollers between adjacent columns, wherein the relation $r / L_w \geq 0.1$ holds where r is the radius of curvature of the corners of the pockets, and L_w is the length of the cylindrical rollers.

7. A cylindrical roller bearing cage as set forth in Claim 6, wherein the relation $r / k_1 \leq 1$ holds, where r is the radius of curvature of the corners of the pockets, and k_1 is the minimum

dimension on the inner diameter side of the annulus.

8. A cylindrical roller bearing cage as set forth in Claim 6, wherein the relation $w5 \cdot Z / \phi d1 \cdot \pi > 0.1$ holds, where $\phi d1$ is the inner diameter of the cage, $w5$ is the distance from the contact section of the pocket that contacts the cylindrical roller end surface to the column, and z is the number of cylindrical rollers.

9. A cylindrical roller bearing cage as set forth in Claim 6, wherein the relation $r < k2 + r1$ holds, where r is the radius of curvature of the corners of the pocket, $k2$ is the amount of projection of a contact section for contact with the cylindrical roller end surface, and $r1$ is the axial chamfer of the cylindrical roller.